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(71) Applicant (for all designated States except US): **THE GOVERNMENT OF THE UNITED STATES**, as represented by **THE SECRETARY OF HEALTH AND HUMAN SERVICES** [US/US]; National Institute of Health, Office of Technology Transfer, 6011 Executive Boulevard, Suite 325, Rockville, MD 20852-3804 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LEPPLA, Stephen, H.** [US/US]; 9501 Starmont Road, Bethesda, MD 20817 (US). **AVALONE, Jennifer** [US/US]; 4 Beehive Lane, Flemington, NJ 08822 (US). **BUGGE, Thomas** [DK/US]; 9802 Bristol Square Lane, Apt. 302, Bethesda, MD 20814

(US). **LIU, Shi-Hui** [CN/US]; 14516 Settlers Landing Way, Gaithersburg, MD 20878 (US). **OSORIO, Manuel** [US/US]; 4710 Bethesda Avenue #706, Bethesda, MD 20814 (US).

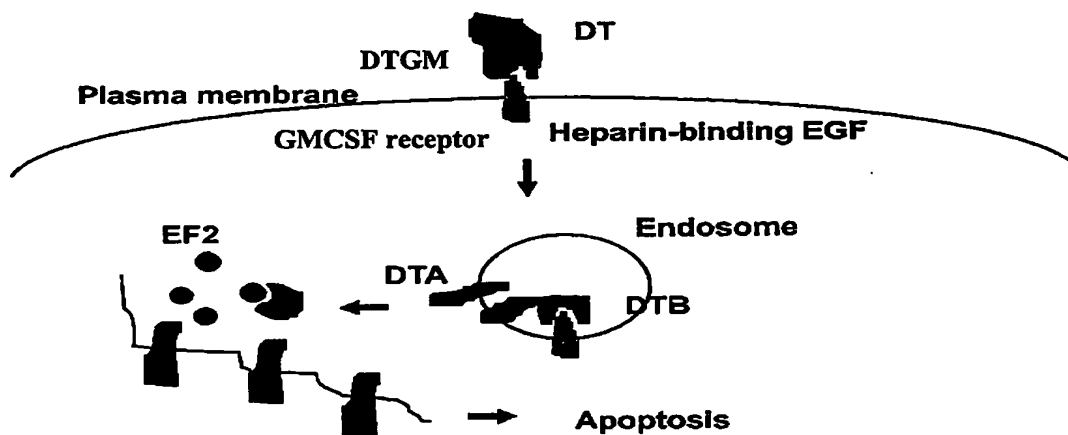
(74) Agents: **FANG, Carol, A. et al.**; Townsend and Townsend and Crew LLP, Two Embarcadero Center, 8th Floor, San Francisco, CA 94111 (US).

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(54) Title: **ACTIVATION OF RECOMBINANT DIPHTHERIA TOXIN FUSION PROTEINS BY SPECIFIC PROTEASES HIGHLY EXPRESSED ON THE SURFACE OF TUMOR CELLS**



(57) Abstract: The present invention provides compositions and methods for inhibiting abnormal cell growth. In particular, the invention provides nucleic acids encoding Diphtheria toxin fusion proteins comprising residues 1-388 of Diphtheria toxin, wherein the native furin cleavage site has been substituted for a matrix metalloproteinase or plasminogen activator cleavage site, and a heterologous polypeptide and the polypeptides encoded by such nucleic acids. In addition, the invention provides methods of treating cancer by administering such polypeptides.



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